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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/932,435	08/17/2001	Hongjie Cao	1942	3469

7590

09/04/2002

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EXAMINER
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GOLLAMUDI, SHARMILA S

ART UNIT	PAPER NUMBER
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1616

DATE MAILED: 09/04/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/932,435

Applicant(s)

CAO ET AL.

Examiner

Sharmila S. Gollamudi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 05 June 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

Amendment A and Extension of Time received on June 12, 2002 are acknowledged.

Claims 1-28 are included in the prosecution of this application.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Rejection of claims 1-11 and 13-17 under 35 U.S.C. 102(b) as being anticipated by Sajic et al (6017860), is maintained.**

Sajic et al disclose a hair composition containing xanthan gum and amphomer and applying it to the hair (Note formulation 14 and example 3). The reference teaches curl retention by applying the composition (Note table 3).

### ***Response to Arguments***

Applicant argues that Sajic et al disclose a 3-in-1 shampoo that contains xanthan gum as a swellable polymeric thickener. However, it is argued that the xanthan gum functions as a thickener rather than a fixative.

Applicant's arguments have been fully considered but they are not persuasive. The examiner has withdrawn the anticipatory rejection of claims 21 and 22. In response to applicant's argument that the xanthan gum does not function as a fixative, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the

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claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). In instant case, Sajic's composition has styling and setting capabilities as clearly evidenced in the abstract, line 3 and the examples.

Further, the argument that Sajic does not contain an effective amount, since the claims do not recite what the effective, fixative amount is, the prior art reads on instant invention.

**Rejection of claims 1-4, 7-8, 10, 11, 15, 18, and 19 under 35 U.S.C. 102(b) as being anticipated by JP 11-236310, of the record, is maintained.**

The reference discloses a gel or cream composition containing xanthan gum. The reference discloses the method of making xanthan gum used in the composition. (Note pg. 5, 6, and example 1)

### ***Response to Arguments***

Applicant argues that JP does not disclose the use of xanthan gum as a hair fixative nor would the xanthan in the reference provide the fixative property. Further, it is argued that JP teaches only a skin cosmetic.

Applicant's arguments have been fully considered but they are not persuasive.

In response to applicant's argument that JP's composition cannot be used as a hair fixative, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to

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patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). In the instant case, the examiner points out that the composition can be used on the hair or skin as taught on page 11, last column. As pointed out in the last office action, the process in which a component in a composition is made does not hold patentable weight in composition claims.

Further, the argument that JP does not contain an effective amount, since the claims do not recite what the effective, fixative amount is, the prior art reads on instant invention.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Rejection of claims 5, 6, and 9 under 35 U.S.C. 103(a) as being unpatentable over JP 11-236310, cited above, is maintained.**

As cited above, JP 11-236310 teaches a composition containing xanthan gum. The reference teaches the drying decrease (moisture content) to be preferably under 12% (pg. 5, first paragraph). The reference teaches that if the drying decrease is too

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high then the xanthan gum will not heat sufficiently, thus decreasing viscosity of the gum if it is not adequately heated.

The reference does not provide an example where the drying decrease is specifically 8% or less.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use 8% or less drying decreases since the JP 11-236310 suggests that a drying decrease of 15% or less is preferable and teaches the advantage of a low moisture content. One would be motivated to manipulate the conditions of the reference with the expectation of similar results as suggested by the reference.

### ***Response to Arguments***

Applicant has not addressed this specific rejection and therefore the obviousness rejection is maintained.

**Rejection of claims 1-22 under 35 U.S.C. 103(a) as being unpatentable over JP 11-236310, cited above, in combination with Sajic et al, cited above, is maintained.**

As set forth above, JP 11-236310 teaches a composition containing xanthan gum that can be in the form of a cream or gel and can be used for hair cosmetics. The reference teaches the method of making xanthan gum prior to mixing it into a cosmetic composition. The reference discloses that xanthan gum provides stability to the composition but has low viscosity and a greasy feel if too much is added. The reference discloses heating the gum 100 degrees and above to increase viscosity, and not to heat it above 140 degrees to avoid discoloration of the gum. The reference teaches the

preferable range of the gum to be 5000-22000 cP and thus it can be used in small quantities. (Note 4-6 and example 1).

JP 11-236310 does not teach using a second polymer in the composition or curl retention.

Sajic et al teach compositions containing xanthan gum and a secondary polymer. The reference teaches the method of applying the composition to the hair. Sajic et al teach the turbidity of the compositions (Note examples). Further, the reference teaches the curl retention at high humidity and the styling effect of the composition (Note Table 3 and 4 and examples).

### ***Response to Arguments***

Applicant argues that Sajic does not teach the composition for its intended mode of use and JP does not suggest the use of xanthan as a hair fixative. Applicant argues that Sajic does not provide objective measurements of the formulations. Lastly, applicant argues that a skilled artisan would not add a hair fixative to a skin cream.

Applicant's arguments have been fully considered but they are not persuasive. The argument to the intended mode of use has been discussed above. The examiner points out that JP clearly suggests the use of xanthan gum in hair compositions as clearly evidenced on page 11, last paragraph. On column 6, lines 1-30, Sajic teaches the anionic polymers and swellable thickening polymers are styling aides. Further, Sajic notes that hair that has been treated with the composition and then remoistened, can be restyled and retains the style on column 5, lines 60-67. Therefore, the motivation to combine JP and Sajic still stands where the combination of polymers and "swellable

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thickening agents (xanthan gum) will increase the holding/styling capability of the composition. Lastly, applicant has not provided evidence that the turbidity of the instant invention and the prior art is different.

**Claims 24-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 11-236310, cited above, in combination with Sajic et al, cited above, in further view of Bhatt et al (6113881).**

Sajic et al and JP teach xanthan compositions as addressed above.

The references do not teach a surfactant-free mousse.

Bhatt et al provide an example that is surfactant free mousse. Bhatt et al disclose that the mousse has better hair retention because it is free of surfactants, which can plasticize dry resinous films left on hair, which adversely affect the hair retention properties.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to not use surfactants in a hair holding composition since Bhatt et al teach the removal of surfactants increase hair holding properties of the resins used.

\*The examiner notes the claim language "consisting essentially of", however the examples contain fixative polymers, etc. which changes the functionality of the composition; therefore the claim language is inconsistent with the specification. Note MPEP 2111.03.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP



§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sharmila S. Gollamudi whose telephone number is 703-305-2147. The examiner can normally be reached on M-F (7:30-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jose Dees can be reached on 703-308-4628. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3014 for regular communications and 703-305-3014 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.

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SSG

*[Handwritten signature]*

August 16, 2002

*[Handwritten signature]*  
JOSE G. DEES  
SUPERVISORY PATENT EXAMINER

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